

AMENDMENTS TO THE CLAIMS:

1. (Cancelled)

2. (Previously Amended): A device for a variable-rate encoding system, comprising:

an LSP coefficient calculating unit calculating an LSP coefficient obtained from a voice signal;

an LSP interval judging unit judging whether an interval on a frequency axis between the LSP coefficients is equal to or less than a prescribed threshold value;

a judging unit judging whether the voice signal is a vowel when a voice part of the voice signal is sounded; and

U a rate setting unit setting a voice encoding bit rate, if the voice signal is a vowel said voice encoding bit rate is set to a bit rate lower than the bit rate usually used when the voice part is sounded.

3. (Original): The device according to claim 2, wherein if one or more obtained intervals between adjacent LSP coefficients does not move and exists within a prescribed range for a specific time period, the LSP interval judging unit judges that the voice signal is a vowel.

4. (Original): The device according to claim 2, further comprising:

a template judging unit provided with a plurality of templates for registering LSP coefficients of a vowel, judging whether the LSP coefficient obtained from the voice signal is approximately equal to the LSP coefficient registered in the template, wherein if the template judging unit judges that the LSP coefficient obtained from the voice signal is approximately

equal to the LSP coefficient registered in the template, the template judging unit lowers an encoding bit rate of the voice signal.

5. (Cancelled):

6. (Currently Amended): A rate control method for a variable-rate encoding system, comprising the steps of:

- (a) receiving a voice signal and calculating an LSP coefficient obtained from a said voice signal;
- (b) judging whether an interval on a frequency axis between the LSP coefficients is equal to or less than a prescribed threshold value;
- (c) judging whether the voice signal is a vowel when a voice part of the voice signal is sounded; and
- (d) if the voice signal is a vowel setting a voice encoding bit rate to a bit rate lower than the bit rate usually used when the voice part is sounded.

7. (Original): The method according to claim 6, wherein if one or more intervals between adjacent LSP coefficients obtained in step(d) do not move and exist within a prescribed range for a specific time period, it is judged that the voice signal is a vowel.

8. (Original): The method according to claim 6, further comprising:

storing a plurality of templates for registering LSP coefficients of a vowel and judging whether the LSP coefficient obtained from the voice signal is approximately equal to the LSP coefficient registered in the template,

wherein if it is judged that the LSP coefficient obtained from the voice signal in step(e) is approximately equal to the LSP coefficient of the template, an encoding bit rate of the voice signal is lowered.

9. (Cancelled)

10. (Currently Amended): A computer-readable storage medium which records a program for enabling a computer to implement a rate control method for a variable-rate encoding system, the process comprising the steps of:

- (a) receiving a voice signal and calculating an LSP coefficient obtained from a said voice signal;
- (b) judging whether an interval on a frequency axis between the LSP coefficients is equal to or less than a prescribed threshold value;
- (c) judging whether the voice signal is a vowel when a voice part of the voice signal is sounded; and
- (d) if the voice signal is a vowel setting a voice encoding bit rate to a bit rate lower than the bit rate usually used when the voice part is sounded.

11. (Original): The storage medium according to claim 10, wherein if one or more intervals between adjacent LSP coefficients obtained in step(d) do not move and exist within a prescribed range for a specific time period, it is judged that the voice signal is a vowel.

12. (Original): The storage medium according to claim 10, further comprising:  
storing a plurality of templates for registering LSP coefficients of a vowel and judging whether the LSP coefficient obtained from the voice signal is approximately equal to the LSP coefficient registered in the template,  
wherein if it is judged that the LSP coefficient obtained from the voice signal in step(e) is approximately equal to the LSP coefficient of the template, an encoding bit rate of the voice signal is lowered.

13. (New): The device according to claim 2, wherein said voice encoding bit rate is set to be half the bit rate usually used when the voice part is sounded if said voice signal is a vowel.

14. (New): The method according to claim 6, wherein in said step (d), said voice encoding bit rate is set to be half of the bit rate usually used when the voice part is sounded if said voice signal is a vowel.

15. (New): The storage medium according to claim 10, wherein in said step (d), said voice encoding bit rate is set to half the bit rate usually used when the voice part is sounded if said voice signal is a vowel.